

## CLAIMS

### I CLAIM:

1. A dishwasher comprising:  
a washing chamber having a door movable from an open position permitting the loading of the washing chamber, through a close position visually covering the washing chamber, to a seal position sealing water within the washing chamber; and  
5        an electric actuator responding to an electric signal to move the door between the close position and the seal position.
2. The dishwasher of claim 1 wherein the close position provides a space between the washing chamber and the door allowing venting of the washing chamber.
3. The dishwasher of claim 1 including a latch releasably retaining the door at the seal position.
4. The dishwasher of claim 3 wherein the latch includes a manual operator releasing a connection to the electronic actuator holding the door in the seal position.
5. The dishwasher of claim 3 wherein the latch includes a switch signaling that the latch has released the door.
6. The dishwasher of claim 1 including a detent providing a force releasably holding the door at the close position.
7. The dishwasher of claim 1 including a sensor sensing the door in the close position to allow the electric actuator to move the door from the close position to the seal position.
8. The dishwasher of claim 1 wherein the electric actuator is mounted in the door to releasably engage structure of the washing chamber to move the door between the close position and the seal position.

9. The dishwasher of claim 1 wherein the electric actuator is mounted on the washing chamber to releasably engage structure of the door to move the door between the close position and the seal position.

10. The dishwasher of claim 1 including a sensor sensing an opening force on the door to cause the electric actuator to move the door from the seal position toward the open position.

11. The dishwasher of claim 1 including force sensor sensing a force resisting closure of the door to cause the electric actuator to move the door from the seal position toward the open position.

12. A latch for a dishwasher having a washing chamber with a door movable between an open position to permit the loading of the washing chamber and a seal position to seal water within the washing chamber, wherein the latch comprises:

5 interacting door and tub positioned latch portions retaining the door at a vent position between the open and close positions allowing venting of the washing chamber around the door or retaining the door at a seal position to seal water within the washing chamber; and

an electric actuator responding to an electric signal to move the door latch from the vent to the seal positions.

13. The latch of claim 12 including a manual operator allowing manual release of the interacting door and tub positioned latch portions when the door is in the seal position.

14. The latch of claim 13 wherein the manual operator includes a switch signaling that the interacting door and tub positioned latch portions have been released.

15. The latch of claim 12 wherein the interacting door and tub positioned latch portions provide a detent releasably holding the door at the close position.

16. The latch of claim 12 including a sensor sensing the door in the close position to allow the electric actuator to move the door from the close position to the seal position.

17. The latch of claim 12 including a sensor sensing an opening force on the door to cause the electric actuator to move the door from the seal position toward the open position.

18. The latch of claim 12 including force sensor sensing a force resisting closure of the door.

19. The latch of claim 12 including force limiter, limiting a force of closure of the door between the close position and the seal position.

20. A dishwasher comprising:

a washing chamber having a door movable from an open position permitting the loading of the washing chamber to a seal position sealing water within the washing chamber;

5 a timer/controller controlling the washing of dishes within the washing chamber and providing a washing signal during a washing period and a drying signal during a drying period during which the dishes dry after washing; and

an electric door actuator communicating with the timer/controller to close the door the washing period to seal water within the washing chamber and to open the  
10 door for venting of water vapor from within the washing chamber during the drying period.

21. The dishwasher of claim 20 further providing a user control permitting opening of the door during the washing period.

22. The dishwasher of claim 21 wherein the user control is a force sensor sensing an opening force applied to the door and communicating with the electric actuator to cause an opening of the door.

23. The dishwasher of claim 21 wherein the user control is a mechanical latch releasing a connection by the electric actuator holding the door in the seal position.

24. The dishwasher of claim 21 further including a sensor providing a signal indicating that the door is closed after opening of the door during the washing cycle, and wherein the timer/controller communicates with the electric actuator to delay sealing of the door to prevent surge pressure build up from heating of the newly  
5 introduced cold air.

25. The dishwasher of claim 21 further including a door closed sensor providing a signal indicating that the door is in the close position.